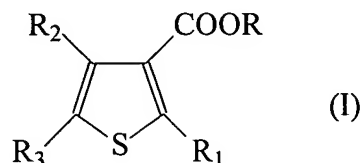


AMENDMENTS TO THE CLAIMS

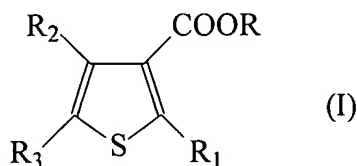
1. (currently amended) A solid catalyst component for the polymerization of olefins comprising Mg, Ti, halogen and an electron donor selected from thiophene derivatives of formula (I):



- wherein R is a branched alkyl group, R₁, R₂ and R₃, same or different, are hydrogen, halogen, R⁴, OR⁴, COOR⁴, SR⁴, NR₂⁴ ~~and/or~~ PR₂⁴, wherein R⁴ is a linear or branched C₁-C₂₀ alkyl, C₂-C₂₀ alkenyl, C₃-C₂₀ cycloalkyl, C₆-C₂₀ aryl, C₇-C₂₀ alkylaryl or C₇-C₂₀ arylalkyl group, optionally containing ~~one or more heteroatoms~~ at least one heteroatom, and ~~two or more~~ at least two of said R₁-R₃ groups can also be joined to form a cycle, with the ~~provisions~~ proviso that at least one of R₁ and R₂ is COOR⁴ and that when R₂ is COO-i-octyl and R is i-octyl, at least one of R₁ and/or ~~and~~ R₃ are different from hydrogen.
2. (currently amended) The catalyst component according to claim 1 in which in the thiophene derivatives of formula (I), R is a primary branched alkyl having from 4 to 15 carbon atoms.
 3. (currently amended) The catalyst component according to claim 1 in which in the thiophene derivatives of formula (I), R₂ is a COOR group.
 4. (currently amended) The catalyst ~~components~~ component according to claim 3 in which at least one of R₁ and/or ~~and~~ R₃ is a C₁-C₂₀ alkyl group.
 5. (currently amended) The catalyst component according to claim 1 in which in the thiophene derivatives of formula (I), R₁ is a COOR group.

6. (currently amended) The catalyst ~~components~~component according to claim 5 in which one of R_2 and R_3 of formula (I) are different from hydrogen.
7. (original) The catalyst component of claim 1 comprising a titanium compound having at least a Ti-halogen bond and the thiophene derivatives of formula (I) supported on a Mg halide in active form.
8. (currently amended) A catalyst for the polymerization of olefins comprising the product of the reaction between:

1.- a solid catalyst component according to any of the claims 1-7 comprising Mg, Ti, halogen and an electron donor selected from thiophene derivatives of formula (I):



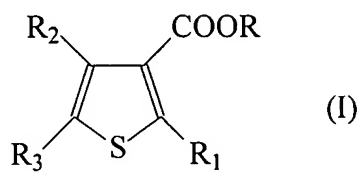
wherein R is a branched alkyl group, R_1 , R_2 and R_3 , same or different, are hydrogen, halogen, R^4 , OR^4 , $COOR^4$, SR^4 , NR^4_2 or PR^4_2 , wherein R^4 is a linear or branched C_1 - C_{20} alkyl, C_2 - C_{20} alkenyl, C_3 - C_{20} cycloalkyl, C_6 - C_{20} aryl, C_7 - C_{20} alkylaryl or C_7 - C_{20} arylalkyl group, optionally containing at least one heteroatom, and at least two of said R_1 - R_3 groups can also be joined to form a cycle, with the proviso that at least one of R_1 and R_2 is $COOR^4$ and that when R_2 is COO -i-octyl and R is i-octyl, at least one of R_1 and R_3 are different from hydrogen;

- an alkylaluminum compound; and[[,]] optionally,

- ~~one or more~~at least one electron-donor ~~compounds~~compound (external donor).

9. (currently amended) The catalyst according to claim 8 in which the alkylaluminum compound ~~(b)~~ is a trialkyl aluminum compound.

10. (currently amended) ~~Process for the (co)polymerization of~~ A process comprising (co)polymerizing olefins, the (co)polymerization being carried out in the presence of any of the catalysts of claims 8-9a catalyst comprising the product of the reaction between:
- a solid catalyst component comprising Mg, Ti, halogen and an electron donor selected from thiophene derivatives of formula (I):



wherein R is a branched alkyl group, R₁, R₂ and R₃, same or different, are hydrogen, halogen, R⁴, OR⁴, COOR⁴, SR⁴, NR⁴₂ or PR⁴₂, wherein R⁴ is a linear or branched C₁-C₂₀ alkyl, C₂-C₂₀ alkenyl, C₃-C₂₀ cycloalkyl, C₆-C₂₀ aryl, C₇-C₂₀ alkylaryl or C₇-C₂₀ arylalkyl group, optionally containing at least one heteroatom, and at least two of said R₁-R₃ groups can also be joined to form a cycle, with the proviso that at least one of R₁ and R₂ is COOR⁴ and that when R₂ is COO-i-octyl and R is i-octyl, at least one of R₁ and R₃ are different from hydrogen;

- an alkylaluminum compound; and optionally,
- at least one electron-donor compound (external donor).